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ABSTRACT

The AID (Accepting Individual Differences) curriculum guide, the fifth in a series of five manuals that attempt to foster acceptance and respect for differences as exemplified by disabilities, presents activities on visual impairments (VI) for instructors' personal learning, and lesson plans for teaching primary grade students. Suggested for personal learning experiences by instructors are simulation activities, reading, observation, a conference with a teacher of VI students, and general resources. Activities of kindergrten through grade 3 students are presented in five lesson plans on the theme, "People are different; people are the same." The lesson plans, which incorporate use of the accompanying student workbook, "Visual Impairment," usually include theme, specific objective, activities (such as the listening game), a list of materials, literature, a discussion guide, directions for leading the activity, and directions for story line. Twelve activities for more advanced students give opportunities such as simulating visual impairment. Questions that students might ask are posed and answered. (MC)

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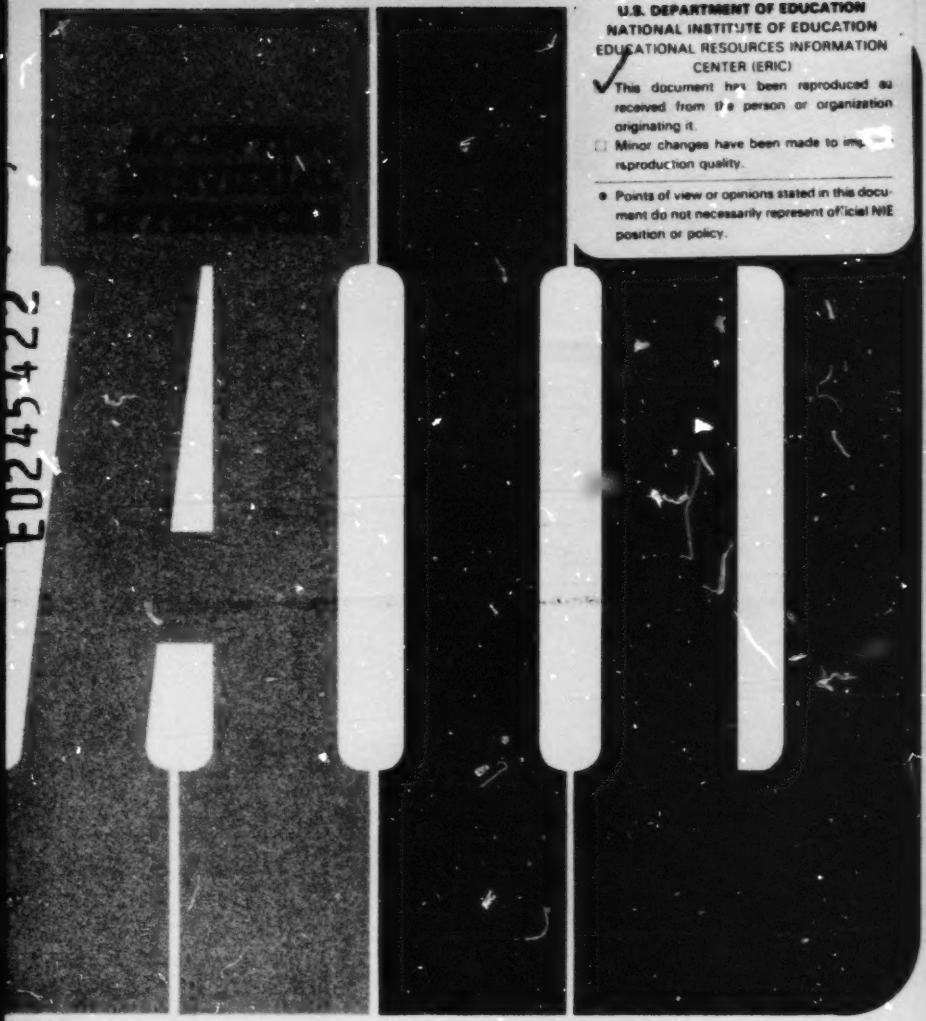

Visual Impairment

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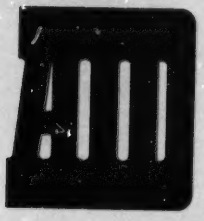

Visual Impairment

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Visual Impairment: Instructor Activities

BASIC INFORMATION ABOUT VISUAL IMPAIRMENT

A variety of terms are used to describe visual impairment, the best-known being *blindness*. Blindness is legally defined as follows:

> Visual acuity of 20/200 or less in the better eye with proper correction, or a limitation in the fields of vision such that the widest diameter of the visual field subtends an angle no greater than 20 degrees.*

"Visual acuity of 20/200" means that the legally blind person must be at twenty feet to read standard type that a person with normal vision can read at two hundred feet. The second part of the definition refers to what is often described as *tunnel vision*—an extreme restriction in the visual field.

The National Society for the Prevention of Blindness estimates that there were 486,550 legally blind persons in the United States in 1975; of this number, a minority were totally without sight.† Many legally blind individuals have some light perception. Some can see large objects well enough to move about independently, and a few can even read print when it is held extremely close to their eyes.

Childhood blindness has declined in recent years because of the tremendous decrease in the incidence of a visual disorder, retrolental fibroplasia, often caused by giving too much oxygen to premature infants. Around 1953 doctors began to become aware of this connection, and the levels of oxygen given to premature babies were reduced. Today, prenatal problems, such as maternal rubella, account for the blindness and accompanying disabilities of many multiply-handicapped people.

The term *partially sighted* is often used to describe those who have serious visual limitations, even with corrective lenses, but who are

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*I. R. Dickman, *Living with Blindness*, Public Affairs Pamphlet No. 473 (New York: 1972).

†E. Hatfield, *Table 1: Estimated Total Cases and New Cases of Legal Blindness by State in 1975* (New York: Society for the Prevention of Blindness, 1976).

able to use vision as a major avenue of learning. It is usually applied to individuals whose visual acuity is between 20/70 and 20/200 in the better eye after proper correction. However, these partially-sighted people need varying levels of special supports, depending upon the efficiency with which they use their sight.

The number of partially-sighted people greatly exceeds the number of those who are legally blind. Estimates of the partially-sighted population vary greatly: On the basis of a 1965 National Health Survey, the U.S. Public Health Service estimated that 1.2 million people could not read ordinary newspapers, and in 1972 the American Foundation for the Blind reported that there were at least 6.4 million people who have trouble seeing, even with corrective lenses.*

A variety of special optical aids, such as telescopic lenses and hand magnifiers, are designed to enable visually limited individuals to use their residual sight in everyday functions. Large-type books and "talking books" (recorded books) are also increasingly available. Even such simple accommodations as moving closer to objects or moving objects closer to them may enable those with severe visual impairments to function through the visual channel.

LEARNING EXPERIENCES

1. Simulation

What does it feel like to be visually impaired?

Place a covering over your eyes. Allow only enough light to come through to enable you to barely distinguish large objects. Go about your normal activities for fifteen to twenty minutes. (Make sure a friend is with you to help avoid accidents.)

What problems do you encounter? What techniques do you have to rely on?

2. Reading

What is it like to be visually impaired?

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*I. R. Dickman, *What Can We Do about Limited Vision?* Public Affairs Pamphlet No. 491 (New York: 1973).

KRENTS, H. *To Race the Wind: An Autobiography.* New York: Putnam, 1972.

How can we better relate to people who are visually impaired?

SWIERINGA, M. *See It My Way.* Grand Rapids, Mich.: The Institute for the Development of Creative Child Care, 1973.

Optional reading:

SULLIVAN, T., AND D. GILL. *If You Could See What I Hear.* New York: Harper & Row, 1975. *Autobiography.*

ULRICH, S. *Elizabeth.* Ann Arbor, Mich.: University of Michigan Press, 1971. *A mother's account of her interaction with a blind child.*

MONBECK, M. E. *The Meaning of Blindness: Attitudes toward Blindness and Blind People.* Bloomington, Ind.: Indiana University Press, 1973.

3. Observation

How do visually impaired students learn?

Arrange to observe visually impaired students in a special school, special class, or regular class with special teaching support. If the students are in a regular class, observe them in interaction with their itinerant or resource teacher. Note specifically:

- Materials used—those found in any classroom, those especially made for the visually impaired, and those created or modified by the teacher
- Curriculum content
- Instructional techniques
- Students' mode of response
- Students' interaction with classmates and adults

4. Conference

Make an appointment to meet briefly with the teacher of the students you observed. He or she may help you better understand what took place. The teacher may also be able to lend you one or two pieces of specialized materials that your pupils could examine and use. The teacher may also be able to suggest a visually impaired individual who would make a demonstration visit to your class.

5. General Resources

For additional help in locating information, materials to borrow, or resource people to visit your classroom, contact the following agencies:

- For talking books, braille books, and free braille alphabet and numeral cards, contact the Regional Libraries for the Blind. The address of the Regional Library for the Blind that serves your area may be obtained by writing to:

  The Library of Congress
  Division for the Blind and Physically Handicapped
  1291 Taylor St., N.W.
  Washington, D.C. 20542

- For literature and a catalog of instructional materials for visually impaired students:

  American Printing House for the Blind
  1839 Frankfort Ave.
  Louisville, Ky. 40206

- For free braille alphabet and numeral cards as well as a catalog of films, publications, aids for the blind, and general information:

  American Foundation for the Blind
  15 West 16th St.
  New York, N.Y. 10011

Visual Impairment: Student Activities

BASIC CONCEPTS

- People are different; people are the same. (This is the specific theme of Lessons 1, 2, and 3.) Mild to moderate visual impairments are very common. Even people with severe visual impairments can do most of the things that other people do.
- People learn in different ways. (This is the specific theme of Lessons 4, 5, and 6.) People with severe visual impairments sometimes use special aids and techniques in learning.

GOALS

- To develop understanding of visual impairments.
- To increase students' awareness of the similarities shared by all people. To help them recognize that visually impaired people are the same as sighted individuals in most ways.
- To familiarize students with the ways in which blind and partially sighted people function and learn about their environment.
- To increase positive interaction between visually impaired and sighted students.

Note: To allow greater flexibility, the Activities for More Advanced Students (pp. 31–37) have not been organized into a series of discrete lessons. For general guidelines on the use of these activities, see pp. 9–10 in *AID: Overview.*

LESSON 1

Theme — People are different; people are the same.

Specific Objective — To heighten students' awareness of how both the visually impaired and non-visually impaired learn through the sense of touch.

Activities

- The Feeling Game
- Which Coat Is Yours? *(optional)*
- The Matching Game *(optional)*

Materials

- *Visual Impairment* flip book, pp. 1–8
- A "touch-and-feel" box, either homemade or purchased commercially. An example of such a tactile kit is:

  MARSHALL, J. S., I. PODENDORF, AND C. SWARTZ. *Sense and Tell.* Glenview, Ill.: Scott, Foresman, 1968.

- An empty box *(optional)*
- Two sets of identical objects *(optional)*
- Students' coats *(optional)*

Literature for Students

- A tactile book, such as:

  WITTE, P. E. *The Touch Me Book.* New York: Golden Press, 1961.

  or

  CLURE, B., AND H. RUMSEY. *How Does It Feel?* Glendale, Calif.: Bowmar, 1968.

- A picture storybook about the five senses *(optional).* One example of such a book, appropriate for kindergarten and grade 1, is:

  ALIKI. *My Five Senses.* New York: Crowell, 1962.

DISCUSSION GUIDE

For this activity, enlist the participation of another adult (of the same sex) with whom the students are familiar. The other adult might be an assistant teacher, student teacher, resource teacher, parent aide, or school maintenance worker. Ask the other adult to stand near you in

front of the group. Then initiate the discussion suggested below. If the students have difficulty at any point, you can give them the cues listed to stimulate their responses.

Instructor	_____ and I are different in some ways and the same in others. Can you first tell us how _____ and I are different?"
Cue	"Look at my hair, and look at _____'s hair."
Student Responses	• Size • Haircolor • Clothes • Age • Use of eyeglasses • Things you do • Things you like
Instructor	"Now think of ways in which we are the same."
Cues	• "How do we see?" • "How do we hear?"
Student Responses	• Both have eyes • Both have ears • Both have noses • Both have mouths • Both have hands • Both have families

Repeat the above procedure using one student and the adult. Then repeat it again, using two students. Many more similarities can be highlighted when the two students are compared.

Summary Statement on Individual Differences	"There are many things about people that are the same, and there are many things about people that are different. But there are more things about us that are the same than are different."
Introduction of Visual-Impairment Illustration	"Some people are the same as we are in most ways, but they are different in one way. There are some people who cannot see."

If the students use the term "blind," say "Yes, people who cannot see are called 'blind.' " If the students do not offer this term, introduce and

define it yourself. Then ask, "Does anyone know someone who is blind?" or "Have you ever seen a blind person?" If a student volunteers, say "Tell us about this person." The student may mention people who use seeing-eye dogs or walk with the help of canes. Some may talk about people who wear glasses or contact lenses. Say, "Yes, some people can't see clearly, but when they wear eyeglasses, they can see better. Eyeglasses help people see better."

Flip Book — Use pp. 1-8 of the *Visual Impairment* flip book in this activity. Say: "This little boy cannot see. He is blind. How do you think he finds out about things?"

Cues — "What other parts of your body besides your eyes can you use to find out about things?
"How can you find out about things in the dark?"

Student Responses
- Touch and feel with his hands
- Listen with his ears
- Taste with his mouth (tongue)
- Smell with his nose

Instructor — "A person who cannot see can learn about things in all these ways. Now let's look at the little boy in the pictures again. What is he doing?"

Student Responses
- Building something
- Feeling the different parts
- Feeling how the parts go together
- Screwing different parts together

Instructor — "Yes. That's what he's doing in the pictures."

Concluding Statement — "A person who cannot see can find out about things in other ways. One of these ways is feeling things."

THE FEELING GAME

Instructor Introduction — "Can you figure out what something is, even though you cannot see it?" [Allow students to respond.] "Let's find out if you can! We're going to play a game. There are some toys and other things in this box. You have to put your hand into the box, touch one thing, and tell us what it is. Then you will take it out of

the box, and we'll see if you were able to figure out what it was without seeing it."

If you are constructing your own "touch-and-feel box," select small toys and common objects such as a comb, toy car, ball, and spoon to place in the box. Place an opening near the top of a large box so that the students will not be able to see its contents. This game can also be played by having the pupil put his hands behind his back and then putting an object into his hands. Help the pupil by asking questions like: "How does it feel?" "Is it round?" "Is it smooth?"

Concluding Statement "One way blind people find out about things they cannot see is by feeling them. Even though we can see, we also find out about things by feeling them."

STORY TIME

Obtain a picture book designed to be touched as well as looked at. (Two suggestions are listed on p. 6; however, there are many others available.) Read the book to the students, and give them a chance to touch the textured pictures in it while keeping their eyes closed.

OPTIONAL ACTIVITIES

Which Coat Is Yours?

Instructor Introduction "When you go to the closet to get your coat, how can you tell which one is yours?"

Student Responses
- Color
- Name tag
- Furry material
- Torn pocket
- Special buttons

Instructor "You know which coat is yours by the way it looks and feels. Let's see if you can find out which coat is yours just by feeling it. I am going to ask a student to close his eyes. Then I am going to hold two coats in front of him and ask him to feel the coats carefully. Then I will ask if he can tell us which coat is his."

The students should be seated in a semicircle near the wardrobe where coats are hung. Place a chair at the front of the semicircle and have each student sit in it when he feels the two coats that you hold up in front of him. After a student has identified a coat (correctly or not), ask him to tell you what made him think that it was his coat.

Concluding Statement "By feeling the coats very carefully, you can usually find out which one belongs to you. This is how people who can't see find things that belong to them or other things that they are looking for."

The Matching Game

Instructor Introduction "We are going to play another feeling game. This time we are going to try to find things that are the same. I have two copies of several objects." [Hold up the duplicate objects.] "I am going to put one of each type of object in a box." [Demonstrate.] "Then I am going to put one of the matching objects in another box." [Demonstrate.] "When a student gets called up, he should close his eyes, put his left hand in this box, and feel the object." [Demonstrate.] "Then he should put his right hand in the other box and try to find the matching object." [Demonstrate.]

Suggestions for Groups of Objects

- Three different-sized balls
- Swatches of felt, denim, velvet, and organdy
- An apple, pear, orange, and potato
- One triangular block, one square block, one rectangular block, and one curved block

Concluding Statement "By feeling the objects very carefully, we could find out which ones matched. People who cannot see do the same thing when they are trying to find matching objects, such as shoes or gloves."

ADDITIONAL LITERATURE FOR STUDENTS

A picture storybook on the five senses (there are many) would be very appropriate. One example for kindergarten and grade 1 is listed on p. 6. Other picture books on the five senses suitable for more mature students are available.

LESSON 2

Theme

People are different; people are the same.

Specific Objective

To heighten students' awareness of how both visually impaired and non-visually impaired people learn by hearing.

Activities

- The Listening Game
- Records of Sounds *(optional)*

Materials

- *Visual Impairment* flip book pp. 9 and 11
- Recordings of environmental sounds designed for students *(optional)*:

  Auditory Familiar Sounds. Niles, Ill.: Developmental Learning Materials (Cat. No. 139).

  BRALEY, W. T. *Happy Time Listening.* Freeport, N.Y.: Educational Activities.

  DUBROWSKY, E. *Discover the Sounds of the City.* Flushing, N.Y.: Urban Media Materials.

  NICHOLS, R. *Sounds I Can Hear.* Glenview, Ill.: Scott, Foresman.

  UTLEY, J. *What's Its Name?* Urbana, Ill.: University of Illinois Press.

Literature for Students

A picture book about how things sound. An example:

BROWN, M. W. *The Noisy Book.* New York: Harper & Row, 1939.

Any of the other "noisy" books by Brown would also be appropriate.

DISCUSSION GUIDE

Instructor

"The other day [or yesterday] we talked about ways people are different from each other and ways they are alike. Do you remember what we said about the ways in which I am different from you? Do you remember what we said about ways we are the same?"

Student Response

Students recall discussion from previous lesson.

Instructor	"We also played a game [or games] to see how much we can find out about things just by feeling them. Today we are going to talk about another way that we can find out about things we cannot see. When you are in your bed at night and it is dark, how do you still know some things are happening?"
Cue	"How can you tell when a fire engine is going down the street or some dogs are having a fight?"
Student Responses	• We can see a little in the dark. • We can hear it.
Instructor	"You can tell a lot about what's going on just by listening. Let's try it. Close your eyes and listen. Then I will ask you to tell me what you heard."

After about two minutes, ask the students to report what they heard. Have them listen for a minute more and report again. Some of the sounds they may report are cars starting, people walking past the room, doors slamming, singing.

Summary Statement	"We can learn about many things happening around us by listening."
Visual-Impairment Illustration	"People who cannot see also learn by listening." [Hold up pp. 9 and 11 of the flip book.] Here is a little boy who cannot see, but he can hear. He is listening to his teacher talk. Because he cannot see, he has learned to listen very carefully. Tell me some of the sounds in the classroom that he may have learned to recognize and that tell him what is happening.
Cue	"What do we do in our classroom that makes a sound we can recognize?"

Have the students close their eyes and listen to someone cutting a piece of paper with scissors, sharpening a pencil, flipping the pages of a book, running water in the sink.

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*Some of the students may comment on the fact that the boy's eyes look different from theirs. This may cause them to ask questions about how his eyes look. Take advantage of the opportunity to discuss the fact that some blind people have eyes that look different, and some look the same, as those of people who can see.

Student Responses

- Paper is being cut.
- Pencils are being sharpened.
- Blocks are being put away.
- Windows are being opened.

Concluding Statement

"One way that people find out about what's happening around them is by listening. People who cannot see and people who can see learn by listening."

THE LISTENING GAME

Instructor Introduction

"Now we're going to play a listening game to see if you can tell what someone is doing even though you cannot see him. I'm going to ask one student to sit up front in this chair and face the wall [or board]. Then another student will do something that makes a sound. The student in the front will have to guess what the sound is."

Suggest a few simple actions such as closing the cabinet door, tearing a piece of paper, and turning on a water faucet to get the activity started.

Concluding Statement

"Listening helps us find out about many things. Blind people learn by listening. People who can see also learn about things by listening."

STORY TIME

Obtain a picture book on learning by listening to sounds (see p. 11 for suggestions), and read the book to the group.

OPTIONAL EXPERIENCES

Records of Sounds

Obtain DLM's *Auditory Familiar Sounds* (Cat. No. 139) or one of the

records suggested on p. 11 that present a variety of sounds for for students to recognize. Use the record according to the directions accompanying it.

LESSON 3

Theme	People are different; people are the same.
Specific Objective	To heighten students' awareness of how visually impaired and non-visually impaired people alike learn through the senses of smell and taste.
Activities	• The Smelling Game • The Tasting Game
Materials	• Smelling samples • Tasting samples
Literature for Students	A "scratch-and-sniff" book, such as: SCHOLASTIC BOOK SERVICES. *Sniff Poems: A Scholastic "Scratch-and-Sniff" Book*. New York: Scholastic Books, 1975. HAZEN, B. *A Nose for Trouble*. Racine, Wisc.: Golden Press (Western Publishing), 1973.

DISCUSSION GUIDE

Instructor	"We have been talking about people who cannot see. How did we say people who cannot see find out about things?"
Student Responses	• With their ears • With their hands • By feeling things • By hearing things
Instructor	"People who cannot see find out about things by touching them and hearing them. They can also find out about things by smelling them or tasting them. How could you know you were passing a bakery?"
Student Responses	• By smelling cake. • It smells sweet.
Instructor	"How does a fish store smell?"

Student Responses	• Fishy! • Ugh!
Instructor	"What other stores or places would you know about by their smells?"
Student Responses	• A pet shop • A flower garden • A pizza store
Instructor	"When you leave here today, see how many things you can smell in the street on your way home. When your supper is cooking tonight, see if you can guess what you are going to have just by smelling it."
Summary Statement	"We can learn about many things by smelling or tasting them."
Visual-Impairment Illustration	"What could a blind person learn by tasting?"
Cue	"If a person cannot see, how does he know what he is eating?"
Student Responses	• If something is good • How someone's cooking tastes • What he is eating
Instructor	"What could a blind person learn by smelling?"
Student Responses	• If he is near a bakery • What his mother is cooking
Concluding Statement	"People who cannot see and people who can see learn by tasting and smelling."

THE SMELLING GAME

Instructor Introduction	"Today we are going to play a game to find out about things by smelling."

Prepare a few small plastic containers. Make holes in the caps. Fill each one with a different substance the students are familiar with, and which have strong odors (instant coffee, perfume, toothpaste, salami, cocoa). Using one container at a time, allow each student to try to identify its contents by smelling it.

Concluding Statement "One way to find out about things is by smelling them. Blind people can find out about things they cannot see by smelling. People who can see also find out about things by smelling."

THE TASTING GAME

Instructor Introduction "Now we are going to play a game to see if we can find out about things by tasting them."

Peel several different fruits, cut them into small pieces, and put them in a bowl. Have one student at a time close his eyes, reach into the bowl, take a piece of fruit, and taste it. Have the student guess which fruit it is.

Concluding Statement "Another way to find out about things is by tasting them. Blind people can find out about things they cannot see by tasting them. People who can see also find out about things by tasting them.

STORY TIME

Obtain a "scratch-and-sniff" book. (Examples of such books are listed on p. 15.) Give the students the opportunity to scratch and smell as you read the story.

LESSON 4

Theme

People learn in different ways.

Specific Objective

To familiarize students with special learning aids for the blind, particularly braille and "talking books."

Activities

- How Do Blind People Read?
- Talking Books
- Toys for Blind Students *(optional)*

Materials

- *Visual Impairment* flip book, pp. 13–17
- Braille cards*
- A "talking book"†
- A braille book†
- Any record or tape recording that tells stories, such as:

  PEARY, H. *Stories for Quiet Listening.* Los Angeles, Calif.: Pacific Records.

  SCOTT, L. B. *Listening Time: Album 1, 2, and/or 3.* Glendale, Calif.: Bowmar Records.

- One or two toys designed for blind students *(optional)*

Literature for Students

KEATS, E. J. *Apt. 3.* New York: Macmillan, 1971. *A beautifully illustrated book about two inner-city boys getting to know a blind man through music (optional).*

DISCUSSION GUIDE

Instructor Introduction

"We all know much more now than we did when we were younger. We learned by looking at things, listening to them, feeling them, and sometimes by smelling or tasting them. One of the ways people learn is by reading. What can you learn by reading?"

This lesson is more appropriate for students who have begun to read. It may, therefore, be omitted or abbreviated if not appropriate.

*Braille cards may be obtained from the American Printing House for the Blind or from the Library of Congress, Division for the Blind and Physically Handicapped. See p. 40 for further directions.

†These aids may be obtained from a Regional Library for the Blind. See p. 4 for further directions.

Cue

- "What kinds of books are there?"
- "What can you learn from reading a sign?"
- "What kinds of signs are there?"
- "Did anyone ever get a letter?"

Student Responses

- Nice stories
- When to walk across the street
- Which bus to take
- How to do something

Instructor "Yes, you can learn about all those things by reading. That's why teachers try to help every student learn to read. But what about people who can't see? Can they learn to read?"

Students will often say no. You should then ask why not. If the students respond by saying "Because they can't see," you should say "They can't see, but they can learn by feeling." Use pp. 13–17 of the flip book to introduce the activities that follow.

Instructor "How is this boy learning his numbers?"

Cues

- "Have you ever used puzzles like this?"
- "How would you work the puzzle?"
- "How is he doing it?"

Student Responses

- He can't see the numbers on the puzzle.
- He touches the bumps on the side of each puzzle.
- He feels how many pegs he needs.
- He puts the puzzles together by feeling each piece.

Instructor "He can learn to read by feeling, too. One blind man figured out how to write letters and words that other blind people can feel. Today I'm going to show you the letters of the alphabet the way blind students learn them."

HOW DO BLIND PEOPLE READ?

Give each student a Braille Alphabet Card and allow a few minutes for exploration.

Instructor "What do you notice about these letters?"

Cue "How are these letters made?"

Student Responses
- With bumps
- With dots you can feel that make a shape

Instructor "Yes. The letters of the alphabet are made for blind people with raised dots that you can feel with your fingers. Each letter has a different shape or number of dots. Let's close our eyes and feel the letter *A* the way it is written for blind people." [Pause.] "Who can tell me how the letter *A* feels?"

Student Responses
- One bump
- A dot

Now have the students close their eyes, feel, and describe two additional letters.

Instructor "This alphabet that blind people feel is called the *braille alphabet.* Some blind people read braille; they read with their fingers. A special teacher helps blind students learn how to read in this way.

"Now I am going to show you a book for students written in braille."

Display and let the students feel an easy picture book in braille. If the book has print as well as braille, you might read it to the students. If the book includes pictures, the students may ask why. You should explain that some people who cannot see letters can see big pictures, although not clearly. The book should be kept available to pupils for individual examination later in the day.

TALKING BOOKS

Instructor Introduction "There is another way that blind people learn things that other people learn from books. Does anyone have a record that tells a story?" [Ask the students to tell about these records.] "Only some books are written in braille and only some blind people know how to read braille well, but blind people can hear many stories on records. Some records are made especially for people who can't see and can't read books. These

records are called 'talking books,' because what you hear when you listen to one of them is someone talking, someone reading a book out loud.
We are going to listen to one of these records."

Attempt to borrow a "talking book" for the blind that includes a familiar story. If this is not possible, play a record with stories on it, and have a copy of a book with the same story in it on hand. After the students have listened to the story, show them the book and make it available for individual perusal later in the day.

Concluding Statement "People who cannot see can learn to read with their fingers and can learn things that are in books by listening to books on records."

OPTIONAL ACTIVITIES

Toys for the Blind

If you have been able to borrow one or two toys designed for blind children from a program that you have visited, this would be an appropriate point to have the students examine them. These toys might include almost any item made by the American Printing House for the Blind.

Literature for Students

Apt. 3 is a book that many students would enjoy. It illustrates how a blind man can make use of his remaining senses to learn what is happening around him and to develop skills—in this case, in music. This book also deals with the fear that students may have of blind individuals.

You can read the book, get students' reactions to it ("Why were the boys afraid?" "What did they find out about the blind man?"), and then make it available for individual examination.

LESSON 5

Theme	People learn in different ways.
Specific Objectives	• To help students understand visual impairments other than total blindness • To help them understand how partially sighted people function
Activities	• Big Books • Making Things Look Bigger • Seeing Far and Near *(optional)*
Materials	• A pair of eyeglasses • A magnifying glass • Three or four pages of a tiny picture storybook made by the teacher • Three or four pages of a giant picture storybook made by the teacher • A large-print book *(optional)*

DISCUSSION GUIDE

Instructor Introduction	Hold up a pair of eyeglasses and say, "Tell me what I am holding in my hands."
Student Responses	• Glasses • Eyeglasses
Instructor	"Why do people wear eyeglasses?"
Student Responses	• To see better • To make things bigger
Instructor	"Who has someone in his family who wears eyeglasses?"
Student Responses	Many of the students will respond affirmatively.

Ask several pupils which member of their family wears eyeglasses and how the glasses help that person. ("What can they do or see better with

their glasses?") If any students in the class wear glasses, use your judgment as to whether to ask them how their glasses help them. If you yourself wear glasses, tell how they help you.

Instructor "Many people wear eyeglasses so that they will see better. Eyeglasses can make things look bigger and clearer.

"Some people need more help to see clearly than they could with eyeglasses like these. They can see big things or things that are very close to them, but they can't see little things or things that are far away—even with eyeglasses. Because they can't see little things, they may have trouble reading.

"Today we are going to learn about how people who can see only big things that are close to them get help in learning to read and doing other things."

BIG BOOKS

In advance of this lesson, prepare a picture storybook similar to a book in the class library. You need only make the first three or four pages of this book, but you should make the pictures and words less than half the size of the standard version so that they can barely be discerned. Then make another copy of the first three or four pages of this book with pictures and words more than twice the size of the standard version. Hold up the standard-sized version of the book and the version with small pictures and print, and say the following.

Instructor "This is how the book [e.g., *The Elves and the Shoemaker*] looks to you [hold up standard version], but to someone who can see only a little, the book might look like this." [Open the small-print version and allow the students to examine the tiny print and pictures.]

"It's very hard to teach students to read if the letters look so small and unclear to them, so some teachers figured out how to help them see the letters better. Can someone think of what this idea was?"

Student Response A student might be able to come up with the idea of an extra-large version of a book.

Instructor "Some people had the idea of making very big copies of books for people who can't see well."

Hold up the standard-sized version and the giant-sized version of the book previously displayed; allow the students to examine them. Then stand about five feet away from a student and ask him to read a sentence from the standard-sized book. (If the student cannot yet read, ask him to name the letters.) Most students will not be able to see the letters at such a distance. Then hold up the giant-sized book at the same page and ask the same student to read it. Most students will be able to see the extra-large letters at this distance. If not, then move a foot closer and repeat the procedure.

Summary Statement "For some people who don't see well, this book [hold up standard-sized version] looks the way it did to you when I held it far away. They can't see the letters clearly. But when the book is written with very big letters [hold up the giant-sized version], they can see the letters well enough to learn to read them."

If you are able to borrow a large-print book, either from a teacher of the visually impaired or from a Regional Library for the Blind, you should display it while telling the pupils that this is a book especially made for people who don't see well. The book should be made available for individual examination later in the day.

MAKING THINGS LOOK BIGGER

Instructor Introduction Hold up the small-print book and the standard-sized book again. Say:

"Not all books are made in big sizes especially for people who can't see well, even with eyeglasses. What is another way that things can be made to look bigger?"

Cue "Is there something that you might use to make something tiny look bigger?"

Student Response It is possible that a student might suggest a magnifying glass.

Instructor — If the students do not know the answer, hold up a magnifying glass and ask: "What is this? What is it used for?"

Student Responses
- A magnifying glass.
- It makes things look bigger.

Instructor — "Yes. What kinds of things can you see much better with the help of a magnifying glass?"

Student Responses — Students will suggest a variety of small things.

Instructor — "Now let's see what happens to the tiny letters in this small book when we look at them with the help of a magnifying glass."

Allow each pupil to use the magnifying glass and report his observations.

Summary Statement — "Some people who don't see well, even with the help of eyeglasses, use a magnifying glass to help them see small things. An eye doctor finds out what kind of a magnifying glass would be best for this person, just as he finds out what kind of eyeglasses would help him the most. Then when the person wants to see something very small, he uses his magnifying glass as well as his eyeglasses."

Concluding Statement — "Some people don't see well even with the help of eyeglasses. They may need to use books with big letters to be able to read; they may need to use special magnifying glasses to see small things; and they may have to hold little things very close to their eyes to see."

LESSON 6

Theme	People learn in different ways.
Specific Objective	To help students understand how blind and partially sighted people get about and travel
Activities	• Going Places • Getting About
Materials	• *Visual Impairment* flip book, pp. 19 and 21 • A cane designed for the blind*
Literature	HEIDE, F. P. *Sound of Sunshine, Sound of Rain.* New York: Parents Magazine Press, 1970. *A poetic picture book told through the thoughts and feelings of a blind boy.*

DISCUSSION GUIDE

Instructor Introduction	Hold up pp. 19 and 21 of the flip book and move them around so that all the students have the opportunity to see them clearly. Then ask a student to tell you about the photographs.
Cues	• "Who do you see in the pictures?" • "What are they doing?" • "Why is that girl using a cane?"
Student Responses	Students will often notice and comment on the girl using the cane. Someone may recognize that she is blind.
Instructor	"Some blind people or people who can only see things very close to their eyes use canes to help them get places. How else do blind people go alone to work or go shopping?"

Give the students the opportunity to suggest seeing-eye dogs or other adults. If they do not, state:

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*Contact a local program for blind adults to borrow such a cane, or use any cane.

"Sometimes people who can see help blind people or people who can only see a little get places. A blind person might ask someone who can see to help him get on a train or bus.

"Sometimes people who can't see use dogs to guide them. These dogs are specially trained to help the blind person go places safely. They stop when they come to the curb of a street. They lead the blind person through the doors of a train and up stairs. These dogs are called *seeing-eye dogs* or *guide dogs*."

Again give the students the opportunity to recount any experiences that they may now associate with blind people. Then display a cane designed for the blind. Ask the students what it is and what it is used for. (The cane is used to detect obstacles in the blind person's path as well as help him assess spatial factors, such as the height of a curb or a step.)

Then ask if anyone knows how the cane is used. Several students will usually volunteer to demonstrate, but they will use the cane in a straight line in front of them. (They should keep their eyes open.) If no one demonstrates the use of the cane swinging in an arc at ground level from side to side in front of him as he walks, you should do it. You should ask the students why this use of the cane is better than just keeping it directly in front of you. ("It protects the blind person from objects that would hit only the side of his body.")

Summary Statement "People who can't see or who can see only a little can go places by using a cane to help them, or by using a specially trained dog, or by getting help from another person."

GOING PLACES

Instructor Introduction "We are going to play a game. We will make something like a hallway by putting tables in two lines and leaving a space in the middle. The tables will be the walls of the hallway. Those students who want to take turns will close their eyes and use the cane to keep them from bumping into the tables."

Arrange three tables or double desks lengthwise in two rows with a space of three to four feet in between. The student should stand at the

beginning of the rows, close his eyes, and use the cane to avoid touching the tables with his body.

Instructor "Blind people often use a cane or a guide dog when they leave their homes, but in their homes they don't. Blind children rarely use canes or seeing-eye dogs. How do blind grown-ups and blind children keep from bumping into things more often when they don't use canes or dogs to help them?"

The basic concept to be developed is that the sense of touch is used in conjunction with the other senses. The blind person also remembers what objects he has felt that lie between certain places.

Now demonstrate:

Instructor "I want to go from the front of the room where I am now to the sink in the back. I know I have to pass five desks and the round table to get there. I will try it."

After making sure that there are no objects on the floor that might trip you, close your eyes and extend your hand about a foot from your side at the level of your hips. Palm down, lightly feel the desks and table as you pass them, and stop when you have passed the table.

Summary Statement "When blind people are at home or in another place they know well, they can get about without any special aids like canes or dogs. If a student were to come into our class, he could get about in this classroom by himself after he got to know it. He would know where things are and could feel them, and he could hear the different sounds of things going on."

STORY TIME

Read the picture book *Sound of Sunshine, Sound of Rain.* Because it is a poetic book, the focus of the discussion following the reading should be feelings and the richness of the experiences of the blind child in the story; or, you may want to substitute a creative language experience for discussion following the reading.

LESSON 7

PROBLEM SOLVING

Instructor Introduction "Suppose a blind student were going to be in our class. Let's talk about how we could do things so that he could work and play with us. Let's say this student's name is Larry."

Now present the following situations* and ask the students for suggestions:

Situation 1 "Suppose it is Show-and-Tell time and somebody brought in a toy airplane that he received for his birthday. Larry wouldn't be able to see the airplane. What could we do so that Larry could find out what the airplane was like, so that he would be able to enjoy Show-and-Tell time, too?"

Appropriate Student Response Larry could be given the airplane to feel.

Situation 2 "Suppose it is snack time and the cookie plate is in the middle of the table. Larry would not be able to see the cookie plate, so he wouldn't know where to reach to get a cookie. What could we do so that Larry could get a cookie?"

Appropriate Student Response Put the plate on the table in front of Larry and tell him it is there. After he has taken a cookie, it can be moved back to the middle of the table.

Situation 3 "Suppose Larry is walking to the sink to wash his hands after using some clay. Two of his classmates are playing with blocks, and a block has fallen on the floor in front of the sink. What would you do?"

Appropriate Student Response Pick up the block before Larry tripped on it.

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*The three situations can be modified to fit the activities of a particular class.

A RESOURCE PERSON

An adult who is blind or visually impaired to a serious extent can be invited to visit the class.* This experience can take two forms. The visitor can serve as a resource person on the blind, or he can serve as a resource person demonstrating a skill not dependent upon vision.

In the former case, he might bring with him special items for the visually impaired that would be of interest to the students. They might include a wristwatch that is "read" by touch, special kitchen devices, and writing devices. He should also be prepared to demonstrate how he performs some common tasks and answer questions.

The latter alternative would be to invite a blind individual to demonstrate a skill, for example, music, crafts, or storytelling. This approach would serve to illustrate that visually impaired individuals not only can successfully negotiate everyday tasks but can also develop skills that are admirable, irrespective of the person's visual status. The resource person should be prepared to answer students' questions as they arise. Afterward, you could further explore student responses.

DIRECT CONTACT WITH VISUALLY IMPAIRED STUDENTS

If there is a special program for visually impaired students in the school, you and the teacher of the program can get together to explore the possibilities of expanded contact between your classes. These possibilities might include joining the groups together for some activities that both groups can enjoy—music, for example. Care should be taken during these activities to allow for individual differences in readiness for close physical contact. A particular student should not, for example, be *directed* to hold the hand of a blind student. You should take advantage of the readiness for interaction that exists, and the situation should be structured to further encourage interaction.

If the school is planning to increase the integration of visually impaired students into regular classes, opportunities for implementing the activities in the lessons will present themselves naturally.

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*Ask a local agency for the blind for help in locating a resource person.

ACTIVITIES FOR MORE ADVANCED STUDENTS

1. Obtain the film listed below and use it for the first activity.

You might want to briefly introduce the film by referring to common (mild) visual impairments. For example:

"How many students have someone in their family who wears eyeglasses?"

"Why?"

"What do eyeglasses do for him [her]?"

Then present the term *blindness* and ask the students to define it.

Donna (Learning To Be Yourself). Bloomington, Ind.: National Instructional Television Center, 1973. *A fifteen-minute color film available for purchase or free preview either as a videocassette or 16 mm film. It is one program in the educational television series* Inside/Out, *and it shows that the process of developing one's individuality is, in many ways, the same for a blind student as for any other. It was designed for students at the middle elementary levels.*

Following the film, ask your pupils to tell you how they felt about Donna. Did the film change any of their feelings about blind people? How? What did they learn about blind people from the film? What misconceptions did the film help correct?

2. Explore the functioning of the eye and its relationship to vision.

Pursue this study into the causes and mechanisms involved in visual impairments and what the world looks like to visually impaired people. This will necessarily involve discussion of the terms *blindness* and *partially sighted* or *visually limited.* It is important for students to understand that most legally blind people are not totally without vision, and that this limited remaining vision may greatly aid in the individual's functioning.

For information and curricular ideas relating to the functioning of the eye, vision, and visual impairments, consult the following resource:

Teaching about Vision. 2nd ed. New York: National Society for the Prevention of Blindness, 1972.

Additional resource materials are listed below:

DICKMAN, I. R. *Living with Blindness.* Public Affairs Pamphlet No. 473. New York: 1972. *Basic information for the adult.*

Facts about Blindness. American Foundation for the Blind, Publication F208. New York: 1974. *Basic information for the adult.*

3. Experience what it feels like to be visually impaired.

Students can experience to a limited extent what it is like to be visually impaired by engaging in the experiences listed below. Ask for volunteers. (Students should not be pressured into joining in these activities.)

Obtain some translucent cloth and cut it into bands about three inches wide. (An old scarf or kerchief might yield several strips.) Ask the students who volunteer for this activity to tie the strip loosely over their eyes. (The students should be able to see light and large objects through their eye coverings.) Ask them to continue their normal activities for fifteen minutes while wearing the translucent eye covering. After the fifteen-minute period is up, have them report their feelings during this experience in simulating limited vision. Also, ask them what cues, other than visual, they relied on during this period. (Watch the students carefully to avoid any accidents.)

4. Study about visual aids for people with very limited vision.

Begin with common eyeglasses, and proceed to such devices as magnifiers and telescopic lenses. Start the discussion with reference to individuals the pupils know firsthand. A resource person who can show the students several low-vision aids and demonstrate how they work would be very valuable. An elementary-school science book can be used as a resource for the study of telescopes and magnifying glasses, which are the bases of many low-vision aids. Resources in this study include:

DICKMAN, I. R. *What Can We Do about Limited Vision?* Public Affairs Pamphlet No. 491. New York: 1973. *Basic information for the adult.*

RASKIN, E. *Spectacles.* New York: Athenum, 1968. *A humorous picture book about a student's misinterpretations of the environment because of her myopia and how eyeglasses helped her.*

5. Study functional aids and procedures for people with low vision.

Large-print books should be examined. The size of the print in these materials should be compared to the size of the print in

standard books. Samples of large-print books may be borrowed from the program for visually impaired students in your school system, or from the Regional Library for the Blind in your area.*

6. Study how the blind achieve mobility via canes, guide dogs, sighted guides, and electronic devices.

A basic reference on this topic is:

How Does a Blind Person Get Around? American Foundation for the Blind, Publication F587. New York: 1975.

Additional resources for adults and students include:

Dog Guides for the Blind. American Foundation for the Blind, Publication F234. New York: 1969.

Sonicguide Catalog. Palo Alto, Calif.: Telesensory Systems, Inc. *An electronic device that provides the blind person with information about the location and nature of objects he approaches as he moves about.*

HEPPNER, E. P. *Inky: Seeing Eye Dog.* New York: Scholastic Books, 1957.

GARFIELD, J. B. *Follow My Leader.* New York: Scholastic Books, 1957. *The story of a blind boy and his guide dog. Some students may be upset by the first chapter of this book in which the boy is accidentally blinded. It is excellent in illustrating how and what a blind individual has to learn, but misleading in suggesting that guide dogs are routinely used by blind children. In fact, they are not often used by individuals under sixteen years of age.*

If you invite a blind individual (or a professional who works with the blind) to your classroom to act as a resource person, ask him if he could demonstrate various mobility aids and methods.

Try to borrow a cane designed for the blind so that interested students can study firsthand how it is used and how it feels to use one. (Contact your local association for the blind.)

Interested pupils may want to study and practice mobility procedures used indoors by blind children and adults. These include the use of landmarks, trailing, squaring off, and hand and forearm techniques. They are described in a pamphlet previously referred to—*How Does a Blind Person Get Around?*

7. Study braille as a system of written communication.

Ask if anyone knows how blind people can read. If no one knows, ask students to think about how else, besides seeing, we can learn

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*The *New York Times* also appears in large print.

about what is happening around us (hearing, touching, tasting, smelling). Then ask which of these senses could be relied on for a system of reading.

Hand out braille alphabet cards. (See p. 40 for information on how to obtain them.) Have students feel the letters and explain the system by examining the patterns for all the letters and numbers.

Adult resource:

Understanding Braille. American Foundation for the Blind, Publication F222. New York: 1969.

Make literature about Louis Braille and the process of developing the braille alphabet available for individual reading. The section of the brochure on Louis Braille that deals with the development of the braille alphabet may be read out loud by students to the whole class and then discussed.

Louis Braille. American Foundation for the Blind, Publication F583. New York: 1972. *A twelve-page brochure about Louis Braille and the braille system.*

DAVIDSON, M. *Louis Braille.* New York: Scholastic Books, 1971. *A very well-written book, but page 9, describing the accident that made Louis Braille blind, may be disturbing to some students.*

Borrow one book written in braille alone and one book written in both braille and print. (See p. 4 for information on how to obtain them.) Have the students examine the book written in both braille and print. Then have any interested students work in pairs to try to read a few sentences of the book written in braille alone, first by looking at the raised dots, later by feeling them

Contact an itinerant or resource teacher working with blind students. Ask him if some of his pupils might be interested in making braille sentence cards for your class. His pupils might select short sentences that communicate information they want to convey to other children, for instance, "This is braille," "We read and write braille," and "Can you read this sentence?" The pupils in your class could use their braille alphabet cards to "read" these sentence cards.

This activity can be combined with a visit to a resource room for the visually impaired, at which time the pupils who made up the braille cards could help your pupils read them and demonstrate the operation of a brailler, which is referred to in the next activity.

Discuss how blind people write. Try to arrange an opportunity for your pupils to examine a *brailler*—a braille typewriter. Contact the program for the visually impaired in your school system to observe a brailler in use, to borrow one, or to have a resource person demonstrate its operation. Discuss the differences between the process of using a brailler and using a print typewriter.

Study how blind people write using a braille slate and stylus. As in the previous activity, arrange to observe the slate and stylus in use, obtain it for examination in the classroom, or have its operation demonstrated by a resource person.

8. Discuss "Talking Books for the Blind."

This is the system of recording written materials on phonograph records or tapes for blind individuals. Discuss why it is a necessary service. (Not all blind people, particularly those who have become blind as adults, can master braille; of those who can read braille, only some can do so quickly.) Descriptions and information about the Talking Book Service, including a catalog of children's talking books, can be borrowed from a Regional Library for the blind. (See. p. 4.) You can also borrow a Talking Book from your Regional Library for the Blind to play for your class.

9. Ask your pupils whether blind students can play ball.

If no one answers affirmatively, or if no one can figure out how, ask them to think again of which other senses a blind person can use in getting information. Ask them to think about how a ball can be adapted so that its movement can be followed using a sense other than vision. If no one thinks of inserting a beeping device inside the ball, suggest it. *Aud-A-Balls,* balls that emit beeping sounds, are used by the blind in playing baseball, football, basketball, volleyball, and soccer.*

Obtain a catalog of *Aids and Appliances for the Blind* from the American Foundation for the Blind. Have interested students examine the catalog individually or in pairs. Ask each student (or pair of students) to select one item that he thinks is interesting to describe to the rest of the class. Draw out the principle underlying the adapted items (i.e., the substitution of touch cues for visual cues).

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*These balls are manufactured by Science for the Blind Products.

A variety of adapted games are included in the catalog. Have a group of interested students study the nature of these adaptations and then modify two games that are not in the catalog for use by the blind.

10. Study how one can interact helpfully with blind individuals.

Read and discuss with your pupils the short book *See It My Way* (see p. 39), which describes, with humor, how people do and should interact with the blind.

Study the following pamphlet with your pupils:

What Do You Do When You See a Blind Person? American Foundation for the Blind, Publication F224. New York: 1970.

Because it was designed for adults, it is not something students can read on their own. After each area of interaction is read, have students role-play the correct way of acting.

Or show the following film:

What Do You Do When You See a Blind Person? New York: American Foundation for the Blind, 1971. *A thirteen-and-a-half-minute, 16 mm, color film produced for adolescents and adults. Its humorous approach lends itself to less mature audiences as well, if adequate study precedes and follows its showing.*

After the film has been shown, role-play the correct procedures in the situations it illustrates.

You may obtain a free poster "When You Meet a Blind Person" from the American Foundation for the Blind (Publication F506).

11. Ask your pupils to think about how people could learn and communicate if they were both deaf and blind.

Describe the process of fingerspelling* into a person's hand and of having such a person "hear" by feeling your lips and throat. Discuss the achievements of Helen Keller. You may find the following references useful in this discussion:

Helen Keller. American Foundation for the Blind, Publication F212. New York: 1968.

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*Fingerspelling is used by the deaf-blind as well as the deaf. Each finger position represents one letter of the alphabet or one numeral. (See the Hearing Impairment Guide for more information.)

One-Hand Alphabet for Deaf-Blind Persons. American Foundation for the Blind, Publication F217. 1973.

Student books useful on this topic are:

DAVIDSON, M., AND W. WATSON. *Helen Keller.* New York: Scholastic Books, 1969.

HUNTER, E. F. *Child of the Silent Night.* New York: Dell Publishing Co., 1963.

12. Invite a resource person to address your class.

If another class or other classes are also using *Accepting Individual Differences,* perhaps the resource person could visit all the classes on the same day. He or she should be asked to demonstrate as well as discuss as many aids and procedures as possible. Many of the aids described in earlier activities will be available only through this person. He or she can be a visually impaired individual, someone who works with the visually impaired, or a person who is both.

CURRICULUM MATERIALS AND REFERENCES*

Books, Catalogs, and Pamphlets

ALIKI. *My Five Senses.* New York: Crowell, 1962. *Juvenile.*

BROWN, M. W. *The Noisy Book.* New York: Harper & Row, 1939. *Juvenile.*

CLURE, B., AND H. RUMSEY. *How Does It Feel?* Glendale, Calif.: Bowmar, 1968. *Juvenile.*

DAVIDSON, M. *Louis Braille.* New York: Scholastic Books, 1971. *Juvenile.*

_____, and W. WATSON. *Helen Keller.* New York: Scholastic Books, 1968 *Juvenile.*

GARFIELD, J. B. *Follow My Leader.* New York: Scholastic Books, 1957. *Juvenile.*

HAZEN, B. *A Nose for Trouble.* Racine, Wis.: Golden Press (Western Publishing), 1973. *Juvenile.*

HEIDE, F. P. *Sound of Sunshine, Sound of Rain.* New York: Parents Magazine Press, 1970. *Juvenile.*

HEPPNER, E. P. *Inky: Seeing Eye Dog.* New York: Scholastic Books, 1957. *Juvenile.*

HUNTER, E. F. *Child of the Silent Night.* New York: Dell Publishing Co., 1963. *Juvenile.*

KEATS, E. J. *Apt. 3.* New York: Macmillan, 1971. *Juvenile.*

KRENTS, H. *To Race the Wind: An Autobiography.* New York: Putnam, 1972.

The Manual Alphabet. Silver Springs, Md.: National Association of the Deaf. *(Cards.)*

MARSHALL, J. S., I. PODENDORF, AND C. SWARTZ. *Sense and Tell.* Glenview, Ill.: Scott, Foresman, 1968. *A tactile kit.*

MONBECK, M. E. *The Meaning of Blindness: Attitudes toward Blindness and Blind People.* Bloomington, Ind.: Indiana University Press, 1973.

RASKIN, E. *Spectacles.* New York: Atheneum, 1968. *Juvenile.*

SCHOLASTIC BOOK SERVICES. *Sniff Poems: A Scholastic "Scratch-and-Sniff" Book.* New York: Scholastic Books, 1975. *Juvenile.*

SWIERINGA, M. *See It My Way.* Grand Rapids, Mich.: The Institute for Development of Creative Child Care, 1973.

Teaching about Vision. 2nd ed. New York: National Society for the Prevention of Blindness, 1972. *Cat. No. P-619.*

ULRICH, S. *Elizabeth.* Ann Arbor, Mich.: University of Michigan Press, 1971.

WITTE, P. E. *The Touch Me Book.* New York: Golden Press, 1961. *Juvenile.*

*Some of the items listed do not cover the disability *per se* but are used to heighten students' awareness of the importance of the five senses.

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Donna (Learning To Be Yourself). Bloomington, Ind.: National Instructional Television Center, 1973. *15 minute, 16 mm, color film or video cassette.*

Some of Our Schoolmates Are Blind. New York: American Foundation for the Blind, 1960. *Appropriate for adults. 20 minute, 16 mm, color.*

What Do You Do When You See a Blind Person? New York: American Foundation for the Blind, 1971. *13½ minute, 16 mm, color.*

Records

Auditory Familiar Sounds. Niles, Ill.: Developmental Learning Materials. *Audiotape (Cat. No. 139).*

BRALEY, W. T. *Happy Time Listening.* Freeport, N. Y.: Educational Activities, 1969.

DUBROWSKY, E. *Discover the Sounds of the City.* Flushing, N. Y.: Urban Media Materials, 1970.

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Free Material

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Visual Impairment

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Visual Impairment

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SOME QUESTIONS STUDENTS MAY ASK ABOUT THE VISUALLY IMPAIRED

Q: Why do some blind people wea glasses?

A: Because sometimes they can see a little with the help of very thick glasses.

A: Because sometimes they can see light and it hurts their eyes.

A: Because their eyes may look different from other people's.

Q: How can a blind person cross the street by himself?

A: By listening to the sound of traffic. (They listen for the sound of cars starting up on the street parallel to them; or, they wait for the absence of traffic sounds.)

A: Drivers know that a person crossing the street with a certain kind of cane might be blind, so they are careful when they see such a person.

Q: How can that person be blind if his eyes are open?

A: Some blind people have eyes that look the same as anyone else's, but they don't work the same way.

Q: What makes people blind?

(Implied question: Will I become blind?)

A: Most blind people were blind since they were infants or became blind when they grew old.

A: Blindness is not something you can "catch" from a blind person.

Helen Keller. American Foundaton for the Blind, Publication F217. New York: 1975. (Up to fifty copies.)

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Understanding Braille. American Foundation for the Blind, Publication F222. New York: 1969. (Up to fifty copies.)

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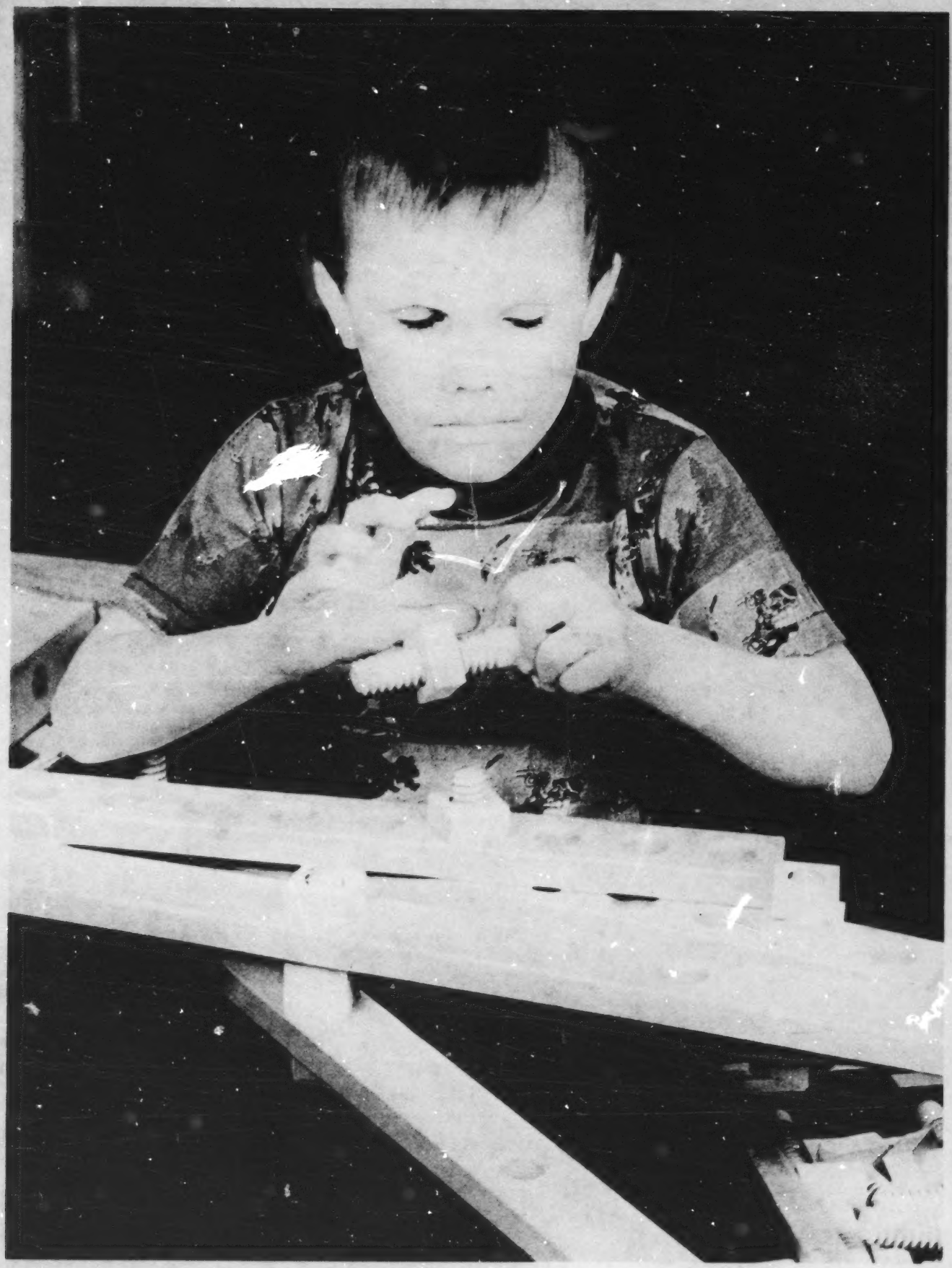

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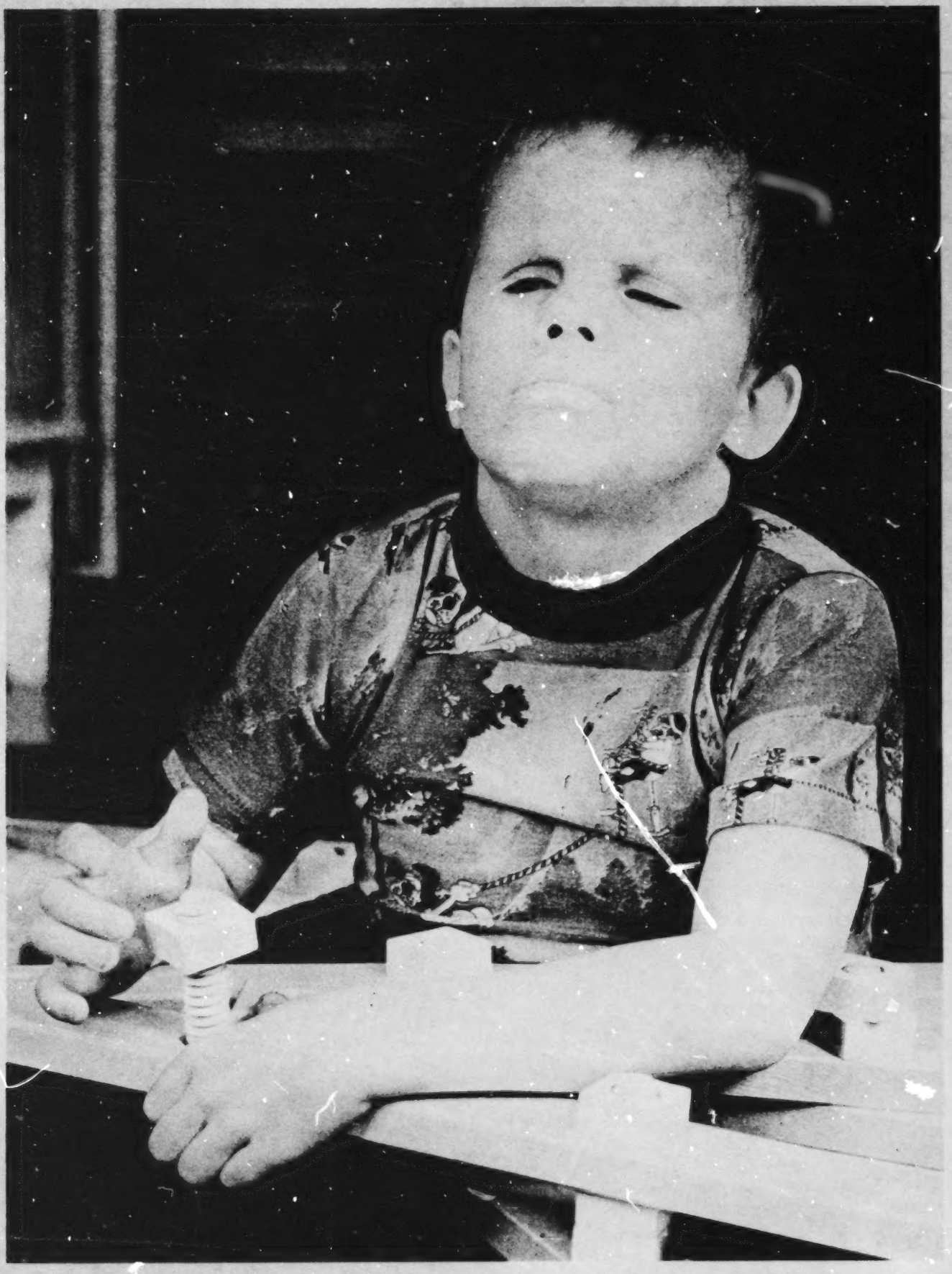

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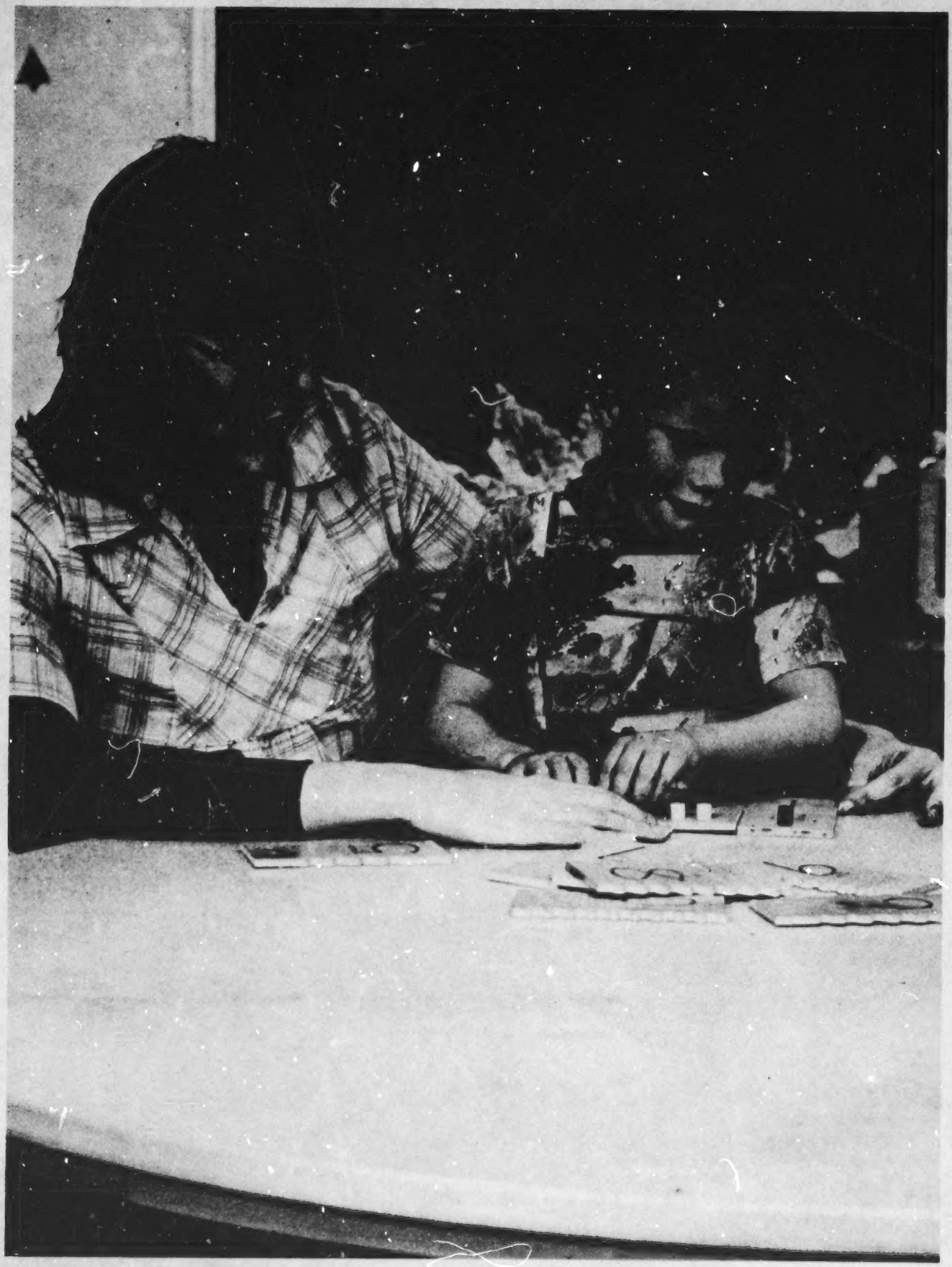

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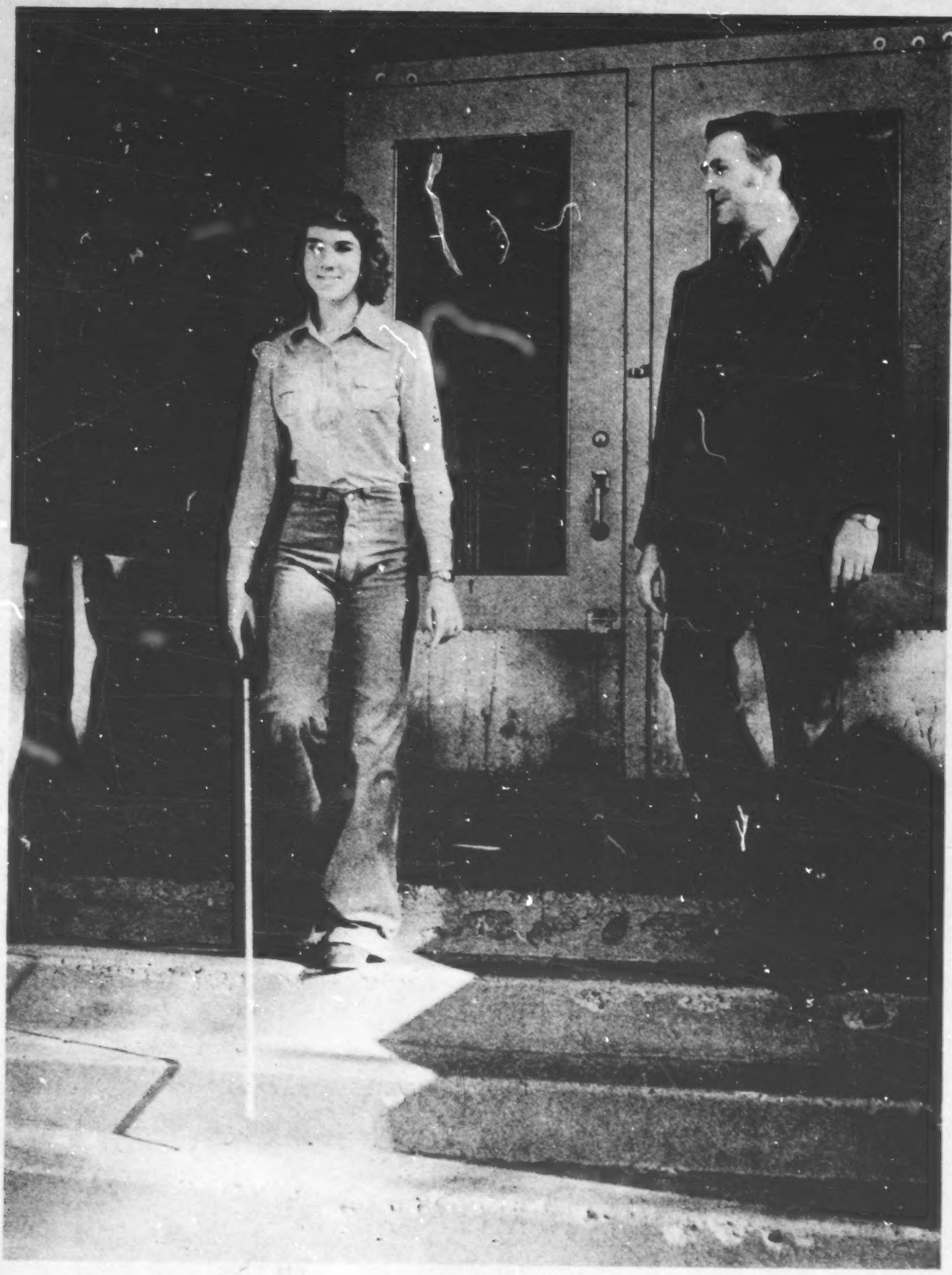

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